The State Society Meets in Wichita May 3, 4 and 5.

The Journal

OF

The Kansas Medical Society

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A20

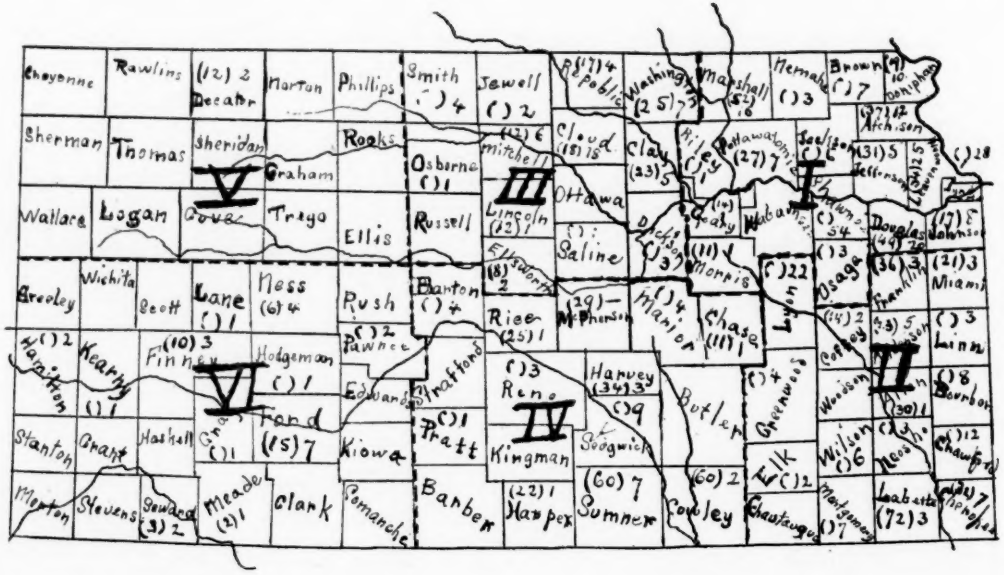
REDISTRICTING THE STATE.

During this year it has been found that six councillors are not enough to cover properly our entire state. Further it has been noted that the districts are not all homogeneous. Therefore it has been proposed to go into the question thoroughly at the Wichita meeting and let the House of Delegates make an entirely new arrangement of the territory, dividing the state into about nine councillor districts. The best suggestion yet made is that the districts follow the railroads rather than the political divisions.

As it is now Kansas City, Topeka, Leavenworth and Atchison are all in one district; whereas Topeka belongs in the Golden Belt territory which runs west from Topeka on the Union Pacific. Similiarly, Kansas City should go into the southeastern tier of counties. Lawrence had best to go with Ottawa and Iola into a district along the Southern Kansas railroad. And finally Leavenworth and Atchison belong to the northern tier of counties.

We don't know whether Wichita has more than her proper "sphere of influence" in the present fourth district, but we are inclined to believe that the work of organization would be facilitated if the unit were smaller. However, we should like to receive expressions of opinion from Wichita, Wellington, Hutchinson, Newton and the surrounding territory on this point.

We hope that the delegates will get down their maps and study on this matter before they come to Wichita. At any rate they should study over the accompanying cut which portrays the original five districts of our state. Our columns are open to those who wish to discuss the matter.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EYE MALINGERING.*

J. S. WEVER, M. D.,
Leavenworth, and Kansas City, Mo.

I propose to present as the material of this paper: (1) summary of a suit against myself for malpractice, (2) summary of a suit against a common carrier for alleged injury and (3) extracts from literature and remarks.

J. W. D. referred by Dr. S—— of Leavenworth, Kansas, lumberman, aged 39, had been a heavy drinker, two uncles and two children had cataract. Vision, right eye, fingers six feet and with plus 8.00 D. equals 6-30. Perception and projection of light in left eye with cataract. Low vision and slightly contracted field were ascribed to high refractive error in right eye together with beginning opacity of lens. Examined November 11, 1899. Operated left eye at Leavenworth hospital January 13, 1900 with iridectomy. At first dressing prolapsed iris was discovered which being small was not excised. Low grade irido-cyclitis ensued, patient leaving hospital and my care about two weeks after operation. No suppuration up to that time.

April 1, 1900. Plaintiff files suit in the Dist. Court Leav. Co. Kan., for $11,000.00, alleging use of unsterilized instruments, etc., and contract to cure.

July 19, 1900. Plaintiff files amended petition. Nothing new.

July 19, 1900. For plaintiff, deposition of W. T. Judd, patient at hospital, consumed two days' time and was of no importance to either side.

November 24. Plaintiff files amended petition alleging defendant had not done an iridectomy, that iris had been torn, blood clots had partially destroyed the eye and that defendant had finished it with an iron probe.

March 23, 1901. For the defendant, Mrs. A., matron at hospital at Leavenworth, now at Presidio, San Francisco, Cal. Deposition: detailed account of preparation of patient, etc., said patient came to hospital with liquor on his breath, that just before operation plaintiff said, "I shall not see out of this eye as it is but if I don't after the operation I shall make it cost Dr. Wever a nice little sum." That on day of operation contrary to orders he raised up in bed repeatedly to spit, talk to his neighbors, etc. That on the day of operation he twice removed the adhesive straps which were connected with the eye dressing. (Hospital notes show that after operation he was given a hypo of morphine and atropine and that on taking a glass of milk two hours later he vomited twice.)

April 15, 1901. For the defendant Dr. Fryer of Kansas City,

*Read before the Academy of Medicine of Kansas City, Feb. 4, 1905.

Mo., testified that he had removed the left eye about the latter part of September 1900 for fear that sympathetic inflammation might ensue in the right eye but that up to that time there had been no sympathetic inflammation and no evidence of suppuration in left eye although it had shrunken. Right eye could distinguish fingers at six feet, lens was cloudy and right nerve atrophying.

June 3, 1901. Plaintiff had several weeks' notice to be ready for trial on this date as suit was now over a year old: He alleged that the depositions of three important witnesses could not be procured. Motion for continuance overruled and then plaintiff asked to have suit dismissed.

After withdrawal of suit I learned that plaintiff's left eye had failed to show even perception of light for another Leavenworth physician and concluded that the plaintiff had been looking through the fingers of his right hand when I thought I found perception and projection. Three or four years afterward his attorney told me that he had not known at that time that "he was that kind of a man," (*i. e*, a malingerer.) The suit cost me much anxiety and $325 in money but the plaintiff received none of it. Propositions for settlement were met from first to last with flat refusal.

Feb. 9, 1904. Dist. Ct. Leav. Co., Kan. H. R. Ten Eick files suit for $30,000.00 against Kansas City-Leavenworth Electric Railway, alleging loss of left eye due to breaking of a defectively fastened incandescent globe and damage to right by sympathy. At defendant's request I examined plaintiff December 3, 1904 and made the following written report to the company:

"Ten Eick, H. R., age 37, collector for the Domestic Mercantile Co.

"*Family History*. No eye trouble in family, father and mother living and in good health, also brothers and sisters.

"*Personal History*. Chickenpox in childhood, began wearing glasses five or six years ago, was not wearing glasses when accident occurred January 20, 1904. Vision in each eye was good before accident. Since accident has not been able to see light in left eye. With right eye can read a line or two and then stop. Not much reading or writing in his work. At time of accident there flowed some blood and fluid, possibly tears, from the eye. About two hours afterward rubbed a piece of glass about one-eighth of an inch long from left eye with handkerchief. There was severe pain in left eye for several days and since then pain less severe, more or less constant. Pain in right eye began in less than twenty-four hours and has been more or less constant ever since, severe at times. There has been no inflammation of the lids at any time. Lost first day and a half after accident. On January 22, 1904, two days after accident, saw family physician who advised him to consult an oculist. No treatment up to this time. Two or three days later (four or five days after the accident) consulted Dr. L——, an oculist. No operation has been performed or advised.

"*Examination.* Vision in right eye is 18-70 without glass and 18-50 with 1.25 cyl. axis 135. Patient claims he cannnot see light when thrown on left eye.

"Left eye:Not a trace of scar on lids or eyeball, pupil slightly more dilated than right and reacts evenly to light; dense cataract in posterior half of lens extending beyond the margin of the pupil. Front half of lens is clear and shows no adhesions to iris. Left eye deviates inward 15 degrees but moves freely in all directions.

"Right eye: media hazy and obstruct view but nerve head and vassels apparently normal. Mucous membrane of neither right nor left eye shows congestion or inflammation.

"*Conclusions.* (1) That the cataract in the left eye existed prior to the accident and the accident had no effect on the cataract. (2) That if the left eye was injured at all it was so slight as to have no permanent effect and left no mark. (3) That the patient can see light contrary to his positive statement. (4) That the left eye is not affected by a sympathetic inflammation set up by the injury to the left."

On December 15 Dr. Sherer of Kansas City, Mo., examined this case and corroborated my findings in every particular. On the same day the case came to trial. Plaintiff's testimony contained only what he alleged in his petition. A motorman was then called but his testimony was not important. Dr. L—— for the plaintiff was then called who stated that the cataract was traumatic. That at the time of his examination there was no mark of injury. The plaintiff's attorney here attempted to change his pleading from alleging that the glass of the globe had cut and injured the eye to the porcelain and brass base of the globe. Objected to and objection sustained. Plaintiff asked to have suit dismissed.

Formerly common carriers and other large corporations were the usual victims of damage suits and obtained little sympathy from the jury or outsiders. But now individuals and municipalities are commonly defendants so that the friends of the former and taxpayers of the latter are not indifferent to the outcome. For $10.00 per year a doctor can now be insured by a company that will either fight or settle a suit for not to exceed $5000.00. I am not in favor of such a scheme.

European figures have been given which place the damage cases in which the eye was a factor at 25 or 35 per cent. I believe that 10 per cent. would be nearer right for this country.

Malingering in general may be classified as follows:

1. Pure simulation.
2. Exaggeration of real symptoms.
3. Substitution of origin of symptoms.

Eye malingering are of two kinds diametrically opposite. (A) Those simulating better vision than they possess and (B) those sim-

ulating worse vision than they possess. The first class would divide on a basis of motive into (a) an innocent sort who desire to secure some position or advancement (*e. g.* army, railroad service, etc.) and (b) a criminal sort who are planning a suit later on against a doctor for malpractice or against an individual or corporation for injury.

For the first class two brief comments will suffice. (a) The importance of the detection of poor vision particularly among railroad employees has been extensively dealt with in recent literature. (b) A doctor in determining whether an eye is operable or not must not allow the patient any room for deception as was done in my case. Some physicians make patients sign a paper releasing them from responsibility of bad results but as a general rule this could not be done. The law on this point is to the effect that in the absence of any agreement a doctor in assuming the treatment of any case does not contract to cure or even benefit. It might be well however where the character of the patient is not above suspicion to have some third party a witness to the statement as to the probable or possible results of the operation.

The second class of eye malingerers, feigning worse vision than really exists, on a basis of motive might be divided into those seeking:

1. Money for malpractice or other injury.
2. Money for accident insurance.
3. Admission to homes or asylums.
4. Pensions or increases.
5. Ground for begging.
6. To escape school, military or penal service.
7. Hysteria.

The sources of injury to an eye are (Arlt, modified.)

1. Sudden compression or concussion.
2. Physical agents (a) remaining in. (b) removed.
3. Chemical agents (including heat, light and electricity.)

The degree of blindness claimed may be:

1. Total in both eyes.
2. Total in one, other partial.
3. Total in one, other normal.
4. Partial in both eyes.
5. Partial in one, other normal.

In order to adhere to the title of this paper we do not propose to enter into phases of the medico-legal consideration of the eye. The question of negligence on the part of the defendant or contributory negligence on the part of the plaintiff would be questions of facts to

be decided by the jury. For the estimation of money value of damage to the eye reference may be had to the works of Magnus and more recently Wurdemann (Ophthalmology, January 1905.)

An oculist would better approach a case of suspected malingering in much the same manner as any other presenting itself for diagnosis.

History —Family and personal. The amount and reliability of information derived from ordinary sources will differ with the case. For instance with a damage suit not much aid could be expected from the family physician and relatives but with a child trying to escape school work or in a case of hysterical blindness they would be only too glad to furnish data which would help the oculist in deciding that it was not a case of permanent or severe injury. (We may say that if the history, associated symptoms, absence of lesion, etc., point to these latter cases malingering tests are in order. Mock operations or treatments are of value to frighten or suggest the patient to a return to nornal.) The oculist will of course take at a proper valuation information such as may be furnished by friends, relatives, former physician or optician, neighbors, fellow-workmen, employors, bystanders and detectives in making up the history. In the patient's history of himself he should be made to adhere to the chronological sequence of all diseases, injury and treatment with re-

(Continued on page 119.)

THE PERINEUM *

J. E. HUNT, M. D.,
Atchison, Kansas.

In the presentation of this subject, I realize that it is often times discussed, but this fact alone makes me bold in bringing it before the society again; for a subject so fruitful for discussion must be an important one. And perhaps it will be of profit to us all to again rethrash an old subject, but one in which we are all more or less personally interested, to say nothing of the responsibility.

*Read before the First District Society Oct. 11, 1904.

It is the man in general practice who is perhaps more responsible than any other for the preservation of the perineum. He is the one who is called to attend a primipara and to see her safely through her first labor. He is the one who is most favorably situated to find a recent rupture and by a ligature or two, save a woman from future pain and suffering. I think you will all agree with me that his position is ideal as regards the perineum. But it is not also true that this important structure is often times neglected in the hurry of a busy practice? If you will pardon an observation of a young man, I believe it to be true that the greatest crime of the average physician is one of omission. And it is certainly true that an omission right here furnishes material not only for the gynaecologist, but for the neurologist as well.

Now, how is it possible to save the perineum during the passage of the head, or perhaps a head and shoulder? Every text book offers a different scheme besides quoting the masters. Hohl's method of applying support not to the perineum, but to the presenting parts, is well known. Olshuasen's method of "rectal expression" between pains, has many warm advocates and certainly does save many perineums. But all seem to agree that the essential factor is the retention of the head in the canal until after the pain is over; in other words, deliver it when the parts are not tense as they must be during pains. I have seen men in what was an honest effort at preservation of the perineum introduce a finger or two into a rigid unerlaxed orifice, thinking that by this means relaxation would be hastened. I believe it to be a practical impossibility to deliver a primipara without some tearing of either the fourchettee or the vaginal mucosa higher up. But whatever methods are used, there are bound to be more or less extensive lacerations, consequently it would seem to be our duty as careful men to inspect the parts thoroughly and in case of a slight tear, often times a single ligature at the time will be sufficient, while in more extensive ones, or in those where there is a so-called complete rupture, infection should be guarded against as much as possible until such a time as a repair would seem advisable.

Opinions differ as to when is the most favorable time for such an operation; of course it depends largely upon how extensive an operation is necessary. But I believe that obstetricians as a rule, advise waiting weeks or even months or until the patient has recovered completely from the confinement and the uterus has again assumed its normal size. But gynaeologists ordinarily advise a "re-

pair as soon after delivering as possible, in the case of complete tear immediately, in others, say three weeks or four weeks, for by this time the congested and oedematous condition of the vulva has passed off, consequently lessening the amount of hemorrhage which is bound to take place at such a time. Just why there should be such a difference in opinion in this regard is perhaps due to the fact that the possible sequelæ of ruptured perinea is not altogether appreciated by the one, and is, by the other class of men.

What are the sequelæ and why should a ruptured perineum be the causative factor in such? An examination into the anatomical arrangement and physiological function of the part will perhaps give us a clew.

We are all familiar with the fact that in sagittal section the posterior wall of the vagina forms a flattened S with the convexity of its lower curve directed forward behind the pubic arch, which fact is accounted for by the relative positions of the planes of the pubic arch and the levator and fibres. The real supporting mechanism of the outlet is not the so-called "perineal body," but the anterior fibres of the levator muscles which as you know arise on either side of the inner surface of the pubic ramus passing backward around the lateral vaginal wall to unite with its fellow behind the rectum. The exact position of these muscles may be easily demonstrated by pressure in each lateral vaginal sulcus with one finger in the rectum.

The so-called "perineal body" is by many supposed to be the supporting body of the pelvis and at the same time acting as a plug or cut-off for the "outlet." But with the position of the levator ani muscles, their relations to the vagina and rectum together with the absolute lack of tissue where this "body" is supposed to be situated, it will be seen at once that the idea is an erroneous one.

This levator muscle which has been very aptly called the diaphragm of the pelvis, acts not as a sphincter of the vagina and in its capacity lending it support, but in lifting as it does the rectum well up under the pubic arch, it at the same time flattens out and holds up between the two the vagina. It is in such a manner that the vaginal outlet and secondarily the pelvic contents is supported. With these facts in mind it can be readily seen what would be the result of a rupture of some or all of these fibres of a giving away of this support. The back-ache, dull and heavy, low down and often times radiating into the hips "dragging sensations" as the patient may express it, a sense of weight and heaviness, with the extreme cases, bearing down pains, dysmenorrhea, irregular and often times diffi-

cult micturition and where the support is little or nothing, a gradual relaxation of the uterine ligaments and a prolapsus of the uterus and coming with it the bladder.

All of these are local symptoms, but when we recall the very intimate connection between the sexual and general nervous system, need we be surprised that headache, more or less constant, general back-ache, gastric irritation of various sorts may be the so-called sympathetic or reflex symptoms?

What a large proportion of the cases entering the Gyn. service of any large hospital present just such a picture. Many times physical wrecks absolutely incapacitated and with a despondency pitiful to behold. And on a most careful pelvic examination, absolutely nothing found but a relaxed vaginal outlet and its usually accompanying uterine displacements.

Perhaps some one may say that the picture is overdrawn, that my enthusiasm has carried me away; in fact that a simple (?) rupture of the perineum could not possibly be the cause of such a state of affairs. In answer, I would simply say consult the Gyn. records of any good hospital or of any man doing such work in private practice, and I am sure proof will be found in either place in abundance.

To cite an extreme case simply to show what does happen as a result of neglect not only on the part of the physician but of the patient as well, I recall an old Irish woman some fifty years old who entered the Gyn. service of a large eastern hospital during my service as Gyn. house officer, with the following symptoms and condition: incontinence of both feces and urine, back ache, dragging sensations, caused by an almost complete rupture of the perineum, which as a relaxation increased admitted of a prolapsus of uterus, vagina and bladder together with protrusion of about six inches of the rectum. She remained with us some four months and was operated upon as many times, all being plastic work with the result that everything was back inside of the body and she had complete control of both her bladder and rectum.

We all have, or have seen cases wherein the condition is not extreme as in the above, but where the discomfort, the suffering both mental and physical would seem to be far in excess of the pathological findings, but can we not now see wherein we have erred? One of my professors used to say, "Gentlemen, always think of all the possibilities before you make a diagnosis." How much of truth and common sense there is in this! If, after we had blamed a stomach, or a head or a weak back and lastly, but perhaps more commonly neurasthenia for all these troubles and treated, or rather mistreat-

ed our patient accordingly and with the natural result; if, I say, after all this we would stop and think of the possibilities, and I am sure you will all agree with me now that the perineum is quite a possibility, how much of time and patience, to say nothing of suffering, would be saved.

Of course this view is as it were the final chapter. The mischief has been done, our duty then is to rectify it if possible.

But how much better it would be to keep constantly in mind the anatomy and physiology and instead of indifference and careless haste just to remember the future possibilities and act accordingly.

Operative procedures on the perineum are many and varied, the variety not depending, as we would suppose, on the actual condition but upon the conception of the individual operator of the functions of the parts.

Most men, however, agree on the necessity of a denudation; the extent varying of course with degree of laceration. But even then there are men that claim that to denude is only so much time wasted, that the object sought is to "lift up and fix" the levator fibres and this can be done as well without as with denudation. Granting this, I would be interested to know what they expect to do with the puckered tissue which is bound to appear, *i. e.*, provided he does any "lifting or fixing" of the muscles.

Kelly has a "modification" of the original Emmett's which has far greater range of application and with somewhat less denudation.

The essential factor in Kelly's modification is the removal of all or of as much of the scar as possible, regardless of the position and the bringing together of parts anatomically so intended by means of the so-called deep lifting sutures, which by the way are always silk worm gut and are removed any time after the second week. Of course it is necessary to slightly over do the repair and in this way allow for some future relaxation.

But whatever operation is done, and there should be no routine method, the following facts should be kept well in mind:

That a simple closure of the "orifice" is not going to accomplish a thing.

That the parts must be well exposed, and the direction of the scars determined, before a knife is applied.

That a surface must be denuded which will be sufficiently large to allow of an almost complete removal of these scars.

And finally that care must be taken to unite parts correctly from the anatomical standpoint.

Of course in the case of complete tears, *i. e.*, where the sphinc-

tre and is torn through, no delay should be permitted. In other other words, such cases should never be allowed to drift into the hands of a gynaecologist. The repair, if done early, aud I mean by this on the following day after the accident, is simple and effective, there being no scar tissue to complicate. Usually in such cases the laceration is a short one, not extending far into the vagina, consequently necessitating only slight denudation. But, in the chronic cases, care must be had against being misled by the ability of the patient to retain feces, in believing that the rupture was complete.

These operations are not beyond the general practitioner, in fact, the earlier they are done, the simpler they are, and consequently so much the less need of unusual skill. So that my plea would be, given a torn perineum, repair it early, thus greatly simplifying operative measures and saving the patient from certain pain and suffering.

THE MANAGEMENT OF BREECH PRESENTATIONS.*

H. J. STACEY, M. D.
Leavenworth, Kansas.

I shall today consider the more serious difficulties encountered in breech presentations, also the methods of dealing with such conditions.

By breech presentations is here meant a presentation of any part of the pelvic extremity of the fetus.

Pelvic presentation occurs in nearly 2 per cent of mature births, the mortality of the fetus being about 30 per cent. It occurs in 6 per cent of labors where there is contracted pelvis; and quite often with premature and dead babies and in hydramnics.

In the mechanism of these presentations, some variations from the mechanism of head presentations shquld be recalled. Dilatation of the cervix and descent of the head is slower. Forward rotation of the anterior hip is imperfect. The delivery of the fetal chest,

*Read before the First District Society, Oct. 13, 1904.

shoulders and head must always be accomplished in a short space of time.

The most common anomaly seen in these cases is the backward rotation of the occiput; the mechanism here varying as the head remains flexed or is extended. Extreme rotation of the breech is important only because it may deceive the obstetrician. Abnormalities in the anatomy of mother or child, or in the physiology of labor, will not be discussed, as they are operative in all presentations.

Serious dangers threaten the child in breech presentations. First, pressure on the cord; there is danger in all cases after the child is delivered, to the navel; and when the child is disproportionately large, after the trunk engages. This danger is greatest when both feet are presenting. Second, premature inspiration, especially liable to occur when cold air is allowed to strike that part of the fetus already delivered. Third, the child is usually destroyed if the head is caught by the imperfectly dilated cervix. Fourth, it may be injured or killed by the efforts made to extract it; for example, injury to the thigh; fracture of the humerus or clavicle; the abdominal organs may be injured and there may be hemorrhages into the muscles, the spinal cord may be torn across, and the skull and brain may be injured. Separation of the placenta is a danger more imaginery than real.

After this hasty review of the mechanism and dangers of pelvic presentations, more careful consideration will be given to the management of these cases. In general, they must be watched much more closely than is usually necessary with head presentations. The labor may be prolonged. The fetal heart must be auscultated frequently. And first of all, the maternal pelvis should be measured and the size of the fetus determined with the greatest possible accuracy, for on their relative dimensions will depend largely the future course to be pursued. Schmitt holds that it is often feasible to do external version, bringing the head, but I think this is rarely possible. "Asepsis should be perfect throughout."

In discussing the details of management, we may properly divide these labors into general classes, according to the difficulties presented.

Normal or easy labors, in which the child is not large, the maternal pelvis is roomy and the expulsion forces normal. The principal difficulties encountered here are doubtless due to too much and too early interference. Leave the case alone until the breech appears at the vulva, being especially careful not to rupture the membranes. The arms and head, if any assistance is required,

may be delivered as suggested later in this paper; and manual dilatation of the cervix may be useful in shortening the time of labor. Anesthesia if used, should be obstetrical not surgical.

In a certain number of cases, delivery will be plainly impossible, for anatomic reasons. The operator must here decide, as in head presentations, which operation shall be undertaken, depending on the general condition of the mother and child, the degree of disproportion in size, and on the facilities and assistance at his disposal. He may choose Caesarian section, dismemberment of the fetus, rarely symphysictomy; if great rapidity of delivery is essential, cervical incisions and Duhrssen's vaginal hysterectomy may be considered.

Uterine inertia may be present. If the fetus is in danger of asphyxia, the fetal heart-beats fail to regain their normal frequency between pains, and become slower and intermittant. There is then need of rapid delivery. And the condition of the mother may make interference necessary.

There remains the largest class of all, difficult, but not impossible labors, among which are all degrees of difficulty, and they include original breech presentations, and those changed into breech by version. They test to the utmost the judgment and dexterity of the obstetrician. One aid to delivery often employed is traction on the body of the child, which may be applied in several ways:

1. Traction with the blunt hook, never to be used excepting on a dead or sacrificed child.

2 Hooking the finger over the groin, the best method for easy traction.

3. The use of the fillet, perhaps there is no better method in simple uterine inertia; the fillet should if possible be placed around the pelvis, coming down between the thighs, useful in normal cases in which the membranes rupture too early.

4. The application of forceps, preferably Farmer's, has about the same field of usefulness as the fillet.

5. Delivery of a foot often gives brilliant results in cases where the breech will not engage.

In general, excessive traction is likely to injure the child directly, and may cause extension of the arms, dorsal displacement of the arms, and extension of the head and otherwise disturb the normal mechanism of labor.

Bringing down a leg early in the second stage of labor is practically necessary if there is a small pelvis, a large child, prolapse of the cord, an unyielding cervix, or need for a hasty delivery. It is

important that the leg be brought down at the right time, before too much liquor amnii has escaped and the uterus has contracted on the fetus. The patient should be partly anaesthetized. Introduce the hand, the palm of which corresponds to the child's abdomen, the other hand supports the fundus of the uterus. Get the anterior leg, press the knee outward and backward, catch the ankle, flex the knee completely and bring down, pulling on the ankle alone.

When the child has been delivered to the umbilicus, the technic of delivery demands speed and precision. The head should be kept flexed and aided to engage by abdominal pressure. Do not waste time with the cord. Keep the body of the child warm to prevent premature inspiration. To deliver the arms, if they are in front of the chest, they can be pulled down by a finger hooked into the elbow; if extended by the head, introduce the hand which corresponds to the arm sought, along the side of the child, on up to the elbow, and with the tips of the fingers bring the arm forward over the child's face and downward, your fingers will act as a splint for the humerus. Delivery of the arms in dorsal displacement depends upon the kind of displacement. When the arm has been extended, then carried down behind the occiput, the edge of the scapula is at the axilla; to deliver, the vertex must be rotated to the opposite side, the arm extended and then brought down as in simple extension. When the arm has been carried backward from a position of flexion the scapula will be close to the spine; pass the hand along the back, grasp the elbow and pull downward and forward. With the arms down, the shoulders can be readily delivered; it is usually easier to first deliver the posterior shoulder, then rotate slightly and deliver the anterior shoulder.

Delivery of the head may be accomplished by pressure from above, by pulling on the jaw and shoulders, and by the forceps. In all breech labors the forceps should be ready for instant use. If the forceps are not at hand, and the head is well down, occiput anterior, one may deliver by the Prague method or by Wiegend's method; with occiput posterior; if the head is flexed carry the child's body downward; if extended, carry it upward. Posterior rotation of the occiput is extremely rare, except when due to untimely pulling.

The most common as well as most serious accident is the arrest of the head at the pelvic brim. In 1903, I published in the *American Journal of Obstetrics* a method devised to meet this complication, from which I now quote.

One is sometimes baffled in his efforts to deliver by a rigid cervix or by the rigid contraction of the lower uterine segment and cer-

vix, causing death by asphyxia and strangling. Forceps can sometimes be put on high; but the application of forceps in that position is always dangerous and often impossible, and the head can never be well handled. This plan also avoids the difficulties caused by a small, non-elastic vagina and rigid or friable perineum; and it is applicable wherever one is compelled to deliver rapidly.

Carefully sterilize the vagina and cervix with tincture of green soap, sterilize water and small gauze sponges, followed by a mild antiseptic solution, as creolin 2 per cent. When the time comes to interfere, thoroughly sterilize the hands, and have the patient profoundly anaesthetized. Now with the hands carefully dilate the vulvar orifice, stretch the perineum and dilate the vagina. If the cervix will not admit the hand, dilate manually until it will. Dilating instruments are worse than useless; the Champetier bag may be considered if there is plenty of time. Bring down both feet. With the child's thighs in the cervix, introduce the hand, the palm of which in the semi-prone position corresponds to the child's abdomen, and dilate the cervix and lower uterine segment thoroughly, until they are practically paralyzed. Upon the completeness of the dilatation depends the success of this method. While dilating, gradually withdraw the chloroform. Clasp the legs and extract slowly, while an assistant or the operator's own hand if necessary, presses down the head in strong flexion. Proper manipulation of the breech and trunk will serve to deliver the child to the shoulders. The arms and shoulders are quickly delivered as stated above. The assistant then holds the child while the operator delivers the head with forceps.

The advantages of this method are:

1. The time of labor is shortened.
2. There is little or no laceration of the mother.
3. The child is neither strangled nor mutilated.

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NASAL OBSTRUCTIONS.*

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In order that this paper may be of interest to all, so far as possible, and that it may be free from the minutiæ of detail so common to the specialist and often tiring to the general practitioner, a symptom, rather than a disease has been selected as the subject. Nasal obstruction is a symptom more extensively associated with the various pathological conditions found in the nasal and post-nasal cavities than any other in the entire field of rhinology.

In order to have a clear understanding of the harmful effects, it will be well to bear in mind the more important physiological functions of the nasal cavities, which are chiefly three-fold. They preside over the sense of olfaction; they give character and resonance to the voice; and the third and most important duty is in connection with respiration.

The olfactory nerve which supplies the upper third of the nasal cavities in the human being, is the special nerve which governs the sense of smell. It is evident then that one of the essential requisites to olfaction is the patency of the nasal cavities, in order that odoriferous particles, when inhaled may come in contact with the terminal filaments of the olfactory nerve. It is also upon the patulous and unobstructed condition of the nasal and post-nasal cavities that the character and quality of both the singing and speaking voice depends. It is here that the tones initiated in the larynx are very much elaborated and developed. Any undue thickening therefore of the mucous membrane, or any condition producing obstruction, either in the post-nasal or nasal cavities, gives rise to that most disagreeable condition known as "nasal twang," and soon articulation becomes fatiguing and the voice breaks down as a result of any effort requiring prolonged use.

Until more recent years the respiratory function of the nose was looked upon as being secondary in importance to that of olfaction and phonation, but the experiments of Aschenbrandt and Kayser have shown that the most important apparatus of the nasal cavities is associated with the functions of respiration, and Bosworth was the first to call attention to the fact that upon its normal functional

* Read before the First District Society, Oct. 10, 1905.

activity, depends, in a great measure, the integrity of the entire mucous membrane of the lower respiratory tract.

This important apparatus referred to consists of those large plexuses of blood vessels located on the lower border of the inferior and middle turbinates, and which supply sufficient moisture to saturate, in a measure, the inspired air. It is estimated that these so-called erectile bodies give off from twelve to sixteen ounces of water during each twenty-four hours in the adult. The nasal cavities are the only parts of the entire respiratory tract endowed with such an apparatus, the remainder being supplied only with mucous secretory glands, which furnish sufficient moisture to keep the mucous membrane in a healthy condition, when the air is inhaled through the nasal cavities, saturated with moisture.

"The function then, of the nasal chambers, is to prepare the ingoing current of air so that it shall exert no injurious influence on the mucous membrane of the passages below. The vasomotor system of nerves so delicately regulate this function that the transudation of serum accurately adapts itself to every existing atmospheric condition, so that when the air is saturated with moisture, no serum escapes, and when the atmosphere is dry, the turbinated vessels are charged with blood, and the serum is poured out in amount sufficient to saturate the in-going air with moisture, without impairing the consistence of the blood in the vessels."—(Bosworth.)

Saturated air, passing in and out of the lungs takes no moisture from the bronchial mucous surfaces and they are thereby left unimpaired, as is otherwise the case when respiration is oral.

As the conditions producing obstruction to nasal respiration are numerous, it will be possible, during the short time alloted to this paper, to deal with only the more important.

Nasal obstruction may be due to pathological processes, either in the nose, naso-pharynx, or ora-pharynx. They may be acute or chronic, benign or malignant.

As cellular activity of the lymphoid structure belongs to child life, nasal obstruction at an early age, is usually the result of pharyngeal adenoids, and may be aided by hypertrophy of the faucial tonsils, which is frequently associated with this condition. Hypertrophy of the pharyngeal tonsil is sometimes present at birth. Infants that frequently have to interrupt nursing for mouth breathing are nearly always the victims of this form of nasal obstruction. A child under ten years of age, with an intermitting quality of nasal obstruction, and the subject of frequent attacks of cold in the head, will be found, in the vast majority of cases to be suffering from ade-

oids. More or less hyperæmia of the turbinates may be present as a result of the adenoids, but this condition soon disappears after removal, if the operation is not too long delayed.

Of all the pathological lesions found in the nasal cavities of adults, hypertrophic rhinitis is the most frequent cause of nasal obstruction. A true connective tissue hypertrophy, such as is found in a hypertropic rhinitis, belongs almost exclusively to adult life, and consequently cannot be taken into consideration as an element of obstruction in child life. It is rarely met with before puberty. Simple chronic rhinitis is a very common form of nasal obstruction, and is differentiated from the hypertropic form by the use of the probe, and cocaine or adrenalin solution. The membranes are swollen and puffy, and the interstitial tissues filled with serum and leucocytes, instead of connective tissure, as in the former.

Deformities of the nasal septum, such as deviations and spurs, are met with in the majority of all adults, but not always to an extent that is pathological, and they only become so when there is an interference with nasal respiration or drainage, or abnormal points of contact are produced.

The nasal cavities, especially the septum and inferior turbinates, are favored sites for the formation of gummy tumors in syphilitic subjects, and these always more or less obstruct nasal respiration and may remain an indefinite time before breaking down.

Malignant growths in the nasal cavities usually pursue a rapid course and are generally recognized by some of the following clinical symptoms, viz: cachexia, hemorrhage, foul odor, pain or deformity. Cachexia is common to both sarcoma and carcinoma. Hemorrhage and deformity belong more to sarcoma, while foul odor and pain are more frequently associated with carcinoma. Hemorrhage and deformity are also symptoms of nasal fibromata, but the absence of cachexia and the firmness of sessile character is in marked contrast with the soft, flabby pedunculated sarcomatous mass.

Of the non-malignant variety of growths found in the nasal cavities, about 80 per cent are myxomitous, usually known as polypi, and are found chiefly in adults They are usually located in the middle meatus along the roof, or outer border of the middle turbinate They are usually attached to a pedicle and present a bluish gray color, with a bright glistening surface unlike any other growth found in the nasal cavities.

The foregoing conditions will probably cover 90 per cent of the causes of nasal obstruction, and as it is the object of this paper to

dwell more at length upon the ultimate effects of neglected cases, the further etiology will not be considered.

It has long been known that nasal obstruction in early life and continuing until after permanent dentition, usually results in more or less facial deformity. Ziem has shown by a series of experiments, that occlusion of one nostril in young animals will produce a marked facial deformity In the mouth-breathing child, there is often observed an irregularity of the arch due to arrest of development of the superior maxillary bones. The arch is narrow and deeper on account of the increased thickness of the alveolus and the sagging of the teeth downward on account of not meeting with the resistance of the lower jaw In some instances the arch is V shaped, and in such cases we always find the superior incisors projecting over the inferior and producing an apparent shortening of the upper lip. In other cases we see what is called a "saddle-shaped jaw," which is an irregularity of the bicuspids. Irregularity of the lower teeth usually follows those of the upper More or less deviation of the cartilaginous septum takes place later on, due to the fact that the cartilage develops more rapidly than the osseous structure.

On account of long disuse, both the nasal fossæ and the post-nasal space are more or less contracted due to lack of development. Many other minor deformities are frequently observed, such as a pinched appearance of the tip of the nose, while the bridge is abnormally flat and thick, giving the appearance of a widening of the distance between the eyes. A prominence of the eyeballs, drooping of the eyelids, flattened cheeks, and as Bishop says, "an obliteration of the normal lines of facial expression, thus lending the appearance of listlessness and intellectual inferiority," are also frequently observed in those addicted to mouth-breathing.

But there is something of vastly greater importance to be considered than the mere cosmetic defects Prolonged nasal obstructian in the child is undoubtedly a hindrance to both mental and physical developmnt There is inability to concentrate the attention, and an air of apathy is apparent. The memory is often bad and the child is backward in his studies Such children are usually pale, anæmic, poorly nourished and show a tendency to stunted physical growth. If this condition is not remedied in time it leaves its impress upon both the mental and physical condition which stands out in defiance to the skill of our profession.

Nasal obstruction occurring in adult life is not fraught with all the serious consequences of that in early life, yet if prolonged, the

consequence is fully recognized when a true estimate is made as to the expectancy of life of such individuals.

When dry air is breathed into the lungs it sets up an irritation of the air cells, which interferes with the absorption of oxygen and the elimination of carbon dioxide. The blood cells, therefore, are not only supplied with an insufficient amount of oxygen, but they are poisoned with carbon dioxide, which greatly impairs their germicidal powers, and thus leaves the system unguarded against the invasion of various pathogenic germs.

If rhinologists would do their duty and attend to the nose and naso-pharynx of both children and adults, it would not be long until there would be recorded a lower percentage in the development of tuberculosis. Individuals who have been mouth-breathers from childhood up, are not likely to reach the standard of weight and physical development. There is usually a general lowering of vitality, a chronic catarrhal condition of the respitory tract, and more or less hypertrophy of the lymphoid tissue forming the tonsillar ring, and these are undoubtedly very important factors in making up what is known as diminished resistance. The fact now seems to be well established, that the germs of several infectious diseases, such as tuberculosis, acute rheumatism, etc., gain entrance to the body by passing through the girdle of lymphoid tissue about the upper respiratory tract. Various experiments have been made by inoculating guinea pigs with tonsillar and adenoid tissue, and it has been found that from 13 per cent to 20 per cent died from tuberculosis, and in none of these cases was tuberculosis present in the individuals from whom the tissue was taken.

Bacteriological examination also reveals the fact that tubercular bacilli are often found in the tonsillar and adenoid tissue of healthy subjects. It is not an unusual thing to find tubercular glands about the neck before the lungs have become involved. Osler says: "A special predisposing factor in the lymphatic tuberculosis is catarrhal inflammation of the mucous membranes, which in itself, excites slight adentis in the neighboring glands." It is true that it is not necessary to have a chronic catarrhal condition or a diseased lymphatic area,in order that the tubercular bacilli may gain entrance, yet it cannot be denied that such conditions greatly facilitate the infection, especially when nasal respiration and drainage is obstructed.

Wright, who has given considerable attention to the subject, says: "We must assume that the tubercle bacillus passes into the

lymphatics through the mucous membrane of the nose and oro-pharynx in a very large proportion of cases of pulmonary infection." The fact now seems to be well established that the old theory that the germs had to be breathed directly into the lungs in order to set up an infection, is no longer tenable as a means of accounting for all cases of tuberculosis. Yet it is true that the danger of infection from inhalation is much greater when nasal respiration is interfered with, for then the individual is without that protection which nature has provided against such invasion.

The possibility of the tubercle bacilli reaching the lungs by gaining entrance to the lymphatic channels through the lymphoid area about the naso and oro-pharynx has been denied by some, but the investigations of Klebs, Baumgarten and others seem to have settled this question in the affirmative. They were able to produce typical cases of tuberculosis by injecting small quantities of bacilli into the bladder, under the skin, and into the eye, the lymphatics being able to carry them to the apices of the lungs, no matter what part of the body was the seat of infection.

In the light of our present knowledge, it would seem, then, that the most common channel of infection is through the lymphatics, and this being true, how important it is for children, especially those who are the off-spring of tuberculous parents, to have all diseased lympoid tissue removed from the upper respiratory tract and thus establish free nasal respiration and free drainage, thereby removing the danger of infection from this source as far as possible.

In nearly all forms of nasal obstruction the cause can be removed with but little risk and inconvenience to the patient, with the exception of malignant growths. Here the prognosis is almost universally bad under all forms of treatment known at present. Fortunately these growths are not of frequent occurrence in the nasal and postnasal cavities.

CONCLUSIONS.

First —Hypertrophy of the lymphoid tissue about the naso and oro-pharynx is the cause, in the vast majority of cases, of obstruction of nasal respiration in child life.

Second.—It is early and prolonged nasal obstruction that produces facial deformity.

Third.—It is also the means of retarding both mental and physical development, and in many instances permanently impairing the same.

Fourth.—Hypertrophied lymphoid tissue is fertile soil for the absorption of various pathogenic germs.

Fifth.—Prolonged nasal obstruction and its effects are important predisposing factors to be reckoned with in the etiology of tuberculosis.

Sixth.—It is important to recognize this condition early and speedily adopt the proper remedial measure and thus obviate both the mental and physical stigma that so frequently dim the luster of our professional art when too long delayed.

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IMMUNITY.

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(Continued from February number.)

Now if all the essential element of the body cell be withdrawn thus, the cell dies; if only a part, then the cell lives and replaces the element by manufacture or addition from the surrounding medium. Here too the cell would overdo the matter and manufacture so much of this element that it would have a surplus; and any more toxin coming along could be fully satiated without injury to the cell itself.

Dr. Vaughan believes that the colon bacillus is a chemical rather than a physical body, because these elements are not extracted by physical means—for instance, dilute mineral acids split off the same substance quantitatively and qualitatively no matter whether the acid be 0.1 per cent or 33⅓ per cent. He believes that he has demonstrated the existence of the following groups in the colon bacillus: nuclein, amido, diamido, monamido, carbohydrate, toxic, hemolytic

and hemoglobin splitting. Now the toxicity of a bacillus might depend upon which group is let loose upon entrance into the body fluids. If it were the toxic, it would probably unite with the nuclein or other essential element in the nerve cells and thus destroy life by causing a cessation of respiration. Dr. Vaughan thinks that this toxic group may be a neurin. If the toxic group be detached from the cellular molecule only slowly or under great stress, then the bacillus would hardly be pathogenic. Now in our body cells Dr. Vaughan has found toxins practically as powerful as the bacterial toxins—for instance one from the liver cells. Hence it is possible that if this group in the body cell be overdeveloped, it would make the body fluids poisonous for any bacilli introduced into them.

The colon toxin when introduced into the abdominal cavity of a guinea pig produces death in 10-24 minutes, but when the intact bacillus is introduced it requires as many hours. This shows that the bacillus must be broken up before the toxin acts.

Under Dr. Vaughan's reasoning an anti-toxine is formed by the process of repair of the body cell He calls a toxin therefore only such a body as can cause the formation of an anti-body—it cannot be therefore a body that would really destroy the body cell, for then no antibody could be formed. Toxins cause death by inhibiting the vital centers, as I have noted above, and not by destroying cells. This latter is the function of poisons and Dr. Vaughan thinks that tuberculosis secretes not a toxin, but a poison because no antibody seems to be formed.

If Dr. Vaughan's hypotheses are true, then we have secured a basis for decided advance in our knowledge of infectious diseases and can shortly secure more definite means for fighting them, for it is not a vital process but one subject to the same laws as govern other chemical reactions.

NOTES.

The antibodies in general use now are often grouped as follows:

1. Antitoxins and antiferments.
2 Agglutinins.
3. Coagulius and precipitius.
4 Cytotoxins (hemolysins, bacteriolysins, spermatoxin, etc)

A toxic* broth deteriorates rapidly on keeping and becomes

* The *toxic* unit is the amount of toxic broth sufficient to kill in four days a guinea pig weighing 250 grams. The *anti toxin* unit is the amount of serum which will completely neutralize the effect of 100 toxic units for a guinea pig of the same weight, *i. e.*, the amount of serum which when mixed with broth containing 100 units of toxin will when injected into the guinea pig cause no symptoms.

what Ehrlich calls a *toxoid*. This he considers evidence that the toxin consists of two parts—a toxophore, or poison-bearing part and a haptophore or hook-bearing part. But as we have seen Dr. Vaughan's hypothesis wil probably offer a simpler explanation of the constitution of the toxin, *i. e.*, that it is simply a neurin which deteriorates on standing, etc.

Inasmuch as the toxin forms a firm chemical union with the body cell (nerve cell) an antitoxin to be effective must be given (1) early and (2) in relatively immense quantities. This of course has been demonstrated by practical experience also, and we now give for diphtheria 2000-3000 units as soon as the diagnosis is made. Other antitoxins are those for diphtheria, tetanus, and also antivenene, antiabrin, antiricin.

The second group of antibodies, the agglutinins and bacteriolysins, inhibit or dissolve the bacteria themselves with which they come into contact We have these sera now for use: the anti-typhoid, anti-cholera, anti-plague, anti-pneumococcic, anti-streptococcic. The most of these are still in the trial stage. Probably the best success has been obtained with the cholera and plague anti-microbic serums. It is the clumping reaction between the serum of the typhoid fever patient and the typhoid germ that we use to establish the diagnosis of typhoid fever. Cholera is diagnosed similarly

Under the terms coagulius and precipitins we refer to the substances formed in the body when solutions or mixtures of proteids are injected. Thus the injection of milk leads to the presence in the serum of a substance which produces coagulation in the kind of milk used—but not for any other kind. So also when the blood of one species of animal is injected into the veins of another species, the blood of the first will be precipitated by the serum of the animal treated. This property has given us a test for blood stains to decide whether they are of human origin or not.

The cytotoxins are the substances formed by the injection into the animals body of body cells. The substance thus formed kills the kind of cell injected. Thus when liver cells are injected the serum will dissolve liver cells. If blood corpuscles (or ordinary blood) be injected, the serum formed will dissolve corpuscles of animals like the first.

An attempt has been made to manufacture a serum which would destroy cancer cells by injecting cancer cells into an animal and using the serum in patients. But we do not know that cancers are different from ordinary epithetium in anything ex-

cept resistence. Hence such a serum has small chance of success.

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CHOREA.

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Chorea, strictly speaking, is an acute disease of childhood, rarely occuring after maturity, or in old age.

Etiology—It occurs more frequently in girls than in boys; in the proportion of about three to one. Most cases occur between the ages of five and sixteen. Cases are rare before the age of four years, unless we include the so-called congenital cases, which, in reality, are in most instances organic cerebral diseases.

Chorea is extremely rare in the dark-skinned races. Negroes and full-blood Indians are rarely subject to this disease. It is especially likely to occur in neurotic families—epilepsy, hysteria and the various other neuroses, some of which can be found in the family history of these cases. In fact, a child that has not back of it a neurotic family history or the history of some misfortune that impairs seriously its own nervous system, is not likely to develop this disease.

Many eminent authorities believe chorea to be associated with rheumatism. Andrew Clark says: "Chorea is rheumatism of the brain." Many observers have found that in many of the cases of chorea, rheumatism accompanied, preceded or followed the attack of chorea, either as a muscular or joint lesion or a resulting heart lesion. The association of these two diseases, so widely observed, proved beyond much doubt that they must have something in common. Some observers have concluded that the exciting cause was

the same, and in cases where the nervous system was in a condition favorable to the development of chorea, we have the disease, otherwise it is absent. Of course a heart murmur heard in a case of chorea may be only an evidence of anaemia. The pains may be only the evidence of an infection if we accept the infection theory of chorea Osler finds rheumatism in 21 per cent. of his cases; Crandell, 54 per cent.; Starr, 18; the British collective investigation, 22 per cent. Reflex irritation is seldom found, but should not be overlooked. Pregnancy may cause its return, or be an exciting cause. Fright and worry seem to be important factors in developing this disease. The three important factors in the cause of this disease are the neurotic, infectious and rheumatic.

As to the precise location of the disease in the nervous system, the frequent unilateral distribution of the disease with the absence of sensory disturbances point to the cerebral cortex.

Piadece cultivated a rod-shaped microbe from the brain and cord of fatal cases of chorea, which injected into animals produced apathy, tremor, convulsive movements and finally, death. Costmorelen, in these cases, found the bacillus only in the nervous system. These observations have not been confirmed by other observers. Westphall has isolated from the cardiac vegetation a microbe, that injected in animals produced arthritis in the subject.

Morbid Anatomy—As death rarely occurs in these cases, the condition found in the fatal cases can not be supposed to give any definite information as to its pathology. The fact that the same condition is not found except in a few of the cases renders the pathology still more doubtful. The chorea corpuscles first described by Elischer and frequently found by others are of little value, as they are frequently found in other conditions, notably in infections. Manasse found them in autopsies on septic subjects and succeeded in producing them in dogs by putrescent intervenous injections. Turner described swelling in the cortical pyramidal cells. His cases were septic and that condition might have accounted for the condition. In the fatal cases, the heart is almost invariably diseased. Osler found that to be the case in 90 per cent. of his fatal cases. Benton and Walker claim to have found a streptococcus in chorea and rheumatism reacting differently from the streptococcus of human septicaemia.

Sypmtoms—Chorea is usual insidious in its onset. Its motor symptoms may be abrupt in their appearance. Certain prodromal symptoms are likely to be present, as anorrhexia, disinclination to do any work or study, peevishness, pain in limbs, irritable temper

and impaired memory. As the disease develops, the patient becomes awkward. Objects fall out of the hand and are broken—sometimes a child is punished for being careless. This, of course, increases the manifestation of the disease. The choreic movements usually commence in the hands and forearms, sometimes in the face; later the lower limbs and rest of the body. At times the choreic movements are confined to a single extremity, or to one side of the body. The choreic movements have as a rule, three distinct features: (1) Conscious movements that are beyond the control of the will: (2) Inability to maintain continuous contraction: (3) Loss of power. Choreic movements usually cease during sleep. Occasionally we see cases in which the choreic movements cease during voluntary muscular action; in other cases, the choreic movements are increased. The choreic movements of the tongue usually begin early, and at times continue until all other motor symptoms have subsided. When the choreic movements are well marked, objects are grasped with difficulty. The sphincters are rarely affected. Sensibility is usually normal, and if not, should arouse a suspicion of hysteria. Aside from the prodromal symptoms, the mind is rarely affected. Reflexes are but slightly, if at all, affected.

Cardiac disorders are present in a large per cent. of the cases. This is no doubt due to the close relation existing between this disease and rheumatism. Organic heart disease seems to be most frequent in cases between the ages of 5 and 10 years. Mackenzie found 66.6 per cent. of choreic patients with organic heart lesions; Osler, 51 per cent.

Chorea, with quite a variation as to symptoms, gradually reaches its maximum and afterward declines, leaving the lower extremities, body, arms, head, face and tongue in the order named. The recurrence of the disease is to be expected and occurs in one-third of all cases. Sometimes it recurs every spring for a number of years. The average duration is from six weeks to four months. Cases lasting one week may be met with. Cases sometimes last as long as eight months or longer.

Quite a variety of forms of the disease have been observed—the grave, gestational, and paralytic forms. In the grave form, *chorea gravis*, it is marked by intensity of its motor and mental symptoms. The choreic movements are general and so intense as to endanger the life of the patient from violence and starvation. The *chorea of pregnancy* usually occurs in primipara, often in unmarried girls. It is sometimes a recurrence of previous attacks that occur in childhood. *Paralytic Chorea:* In this form, the paralysis is the im-

portant smyptom. The choreic movements being slight, and not easily detected. It usually occurs in young children at the age of 5 or 6 years. The diagnosis is as a rule not difficult. The prodromal symptoms and the choreic movements usually enable the diagnosis to be readily made. It is, strictly speaking, in children a self limited disease and recovery is the rule, unless the heart lesion should prove fatal. The older the patient, the less likely are we to have a recovery.

Treatment—In the treatment of this disease, drugs alone will not suffice. Of the drugs to be used, arsenic and anti-rheumatic remedies form the chief list of reliables. Fowler's solution pushed to its limit is of the greatest value. Anti-rheumatic remedies, as the salicylates, where evidence of rheumatism is present, are of the greatest value Any existent constipation should be corrected to avoid intestinal irritation or fœcal intoxication. Nutritious repair to replace the waste caused by over action, is very essential. Give milk, fruit and vegetables in abundance, avoiding red meats. Rest to body and proper sleep are indispensible in the treatment of this disease. Re-educate the muscles that have been impaired by the disease. Proper exercise of the muscle followed by rest will greatly aid in the treatment of this disease.

DISCUSSION.

DR. EASTMAN: The paper has covered the ground so well that there is very little to add, excepting a suggestion in regard to preventive treatment. The condition seems to be due, essentially, to an impairment of the general nutritive processes of the body, and most likely to occur in children of neurotic tendency, consequently, prevention is of the greatest importance To this end the hygienic surroundings of the neurotic child should be so modified as to be conducive to his physical development. He should have plenty of sunlight, fresh air, nourishing and easily digested food, proper bathing and suitable clothing, etc., in order to develop resistance to disease, and to build up the general physical health, expecting the nervous and mental conditions to gain and strengthen with the physical improvement. Schooling with its nervous and mental stress, should be deferred until the physical system has been strengthened and developed.

DR. BARNES: I think it is very essential that children having such a tendency should be kept out of school. Lately I have tried the various forms of electricity with a great deal of relief from these conditions. The only objection is that I cannot hold the patient long enough. After using the head spray for 15 or 20 minutes at a sitting (or whatever form I think efficacious) for a number of treatments, they soon feel so much improved that I cannot get them to follow up and continue the treatments as they really should to entirely overcome the condition.

THE CONSULTANT, CONVENTIONAL AND IDEAL.*

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In the varied course of his experience, the general practitioner of medicine not infrequently finds occasion for calling upon another physician for aid or counsel.

Such consultations are generally for the purpose of obtaining advice and help in the conduct of different cases; but on the other hand, they may be evoked in support or justification of the attendant's procedure and opinion.

When a consultation is purely advisory in character, it naturally springs from a feeling of uncertainty or inadequacy in either the matter of diagnosis or that of treatment.

Nothing is more common in the experience of even the best and most able physicians than a feeling of doubt or uncertainty as to the true nature or extent of the disease factors in a given case. This doubt is not apt to be so much in the denominating of the morbid process as in the appraisal of its varied characters. Physicians proverbially differ and disagree about disease values, and always will, but perhaps less and less as time goes on, because of improved and accurate methods of making inventory. Diseases are not to be considered entities, as of old, but as the constantly varying manifestations of groups of effects produced by varying causes. No two diseases of the same name, therefore, can ever be alike; and sometimes diseases properly classed under the same name are so radically dissimilar as to be impossible of comparison. Again, the characteristic features of a given disease may be obscured and even concealed by complications with other and different affections, thus rendering the diagnosis more or less difficult, or even quite impossible.

The difficulties in diagnosis thus occasioned because of rare and atypical manifestations of morbid processes in the human body, and by reason of their obscuration by and complication with other diseases, are further enhanced by the common unfamiliarity with refined diagnostic technic which so many practitioners do not attempt to conceal. Laboratory methods of arriving at definite esti-

*Read before the State Society at Topeka, May 1904.

mations of vital functions and their deviations are not in general vogue with the busy practitioner. He is either indisposed to take the time for such laborious and tedious inquiries, or lacking the familiarity with the methods, is unable to put them into application for himself. And if this were all, it would not be so deplorable as the more regrettable admission that must be made, that some of the classic methods of physical diagnosis are little practiced by the average physician, and even when brought into requisition are perhaps practiced superficially, with little skill, and the findings therefrom often erroneously interpreted.

But even granting that no room remains for doubt in the diagnosis, there is yet often ground for advisory counsel in the matter of treatment.

Of all the questions that ever and anon recur to the perplexed medical mind, the most frequent is this: "What shall I do for this patient?" The therapeutic art is so imperfect, and its available agencies are so manifold, that no practitioner can ever hope to become acquainted with them all, much less to become expert in their employment. No two practitioners have the same list of favorites in their armamentarium. A drug successfully used by one may be in utter disfavor with another. Mechanical and operative measures differ vastly in their conception and technique with different individuals. And this lack of perfection in therapeutic art and the varieties of methods offering for the attainment of the same desideratum give rise to a common occasion for invoking counsel.

But, in addition to the advisory purpose of consultations, it often becomes necessary for the attendant to have counsel for the purpose of supporting himself and ratifying his procedure in certain cases. This necessity may arise, not because of any conviction of shortcoming on his own part, but because of the detection of lack of confidence arising in the patient or among his friends. The attendant should endeavor to anticipate such distrust as may thus arise, calling to his support another physician whose opinion would have weight as well as honesty of statement. In addition to this natural weakening of confidence in the attendant that so commonly crops out at critical times among despairing or discouraged friends of the sick, there sometimes may arise just grounds for a lack of confidence on the part of the physician in the ultimate disposition of the patient or of his friends toward himself. Any apprehension of evil motives will especially justify the calling of counsel especially in cases of fracture or other surgical conditions, where the best possible issue of the case may still leave room for disappointment,

and perhaps furnish a pretext for invidious criticism to those disposed to blame a physician for every unhappy event in life.

Then the office of the consultant may be merely to quiet the minds of the anxious and despairing family when all hope of obviating an inevitably fatal issue is abandoned. Even at such a time those most concerned usually desire to have the unhappy verdict reaffirmed by one or more physicians in whom they may have confidence before relinquishing the last lingering hope. And this sympathetic and faithful attendant will not deny them this consolatory benefit of counsel.

The conventional consultations called to fulfill any of the requirements here specified are often defective in several essential particulars, and by these defects, the ends desired are defeated.

First of all, the selfish element is often apt to dominate the attendant in his choice of a consultant. The physician in charge is, consciously and unconsciously, prone to think that his dignity and judgment are somewhat at stake in those cases where it is a difficulty of some kind that is to be settled; and his desire to be sustained with prestige undiminished in the community is apt to govern him in the selection of counsel.

This human animal instinct of self-preservation is not to be disregarded, for it is natural and potent, and all are in a greater or less degree biased by it. Nor is it be censured as altogether ignoble; yet it must be acknowledged to operate frequently against the attainments of the real object and purpose of a consultation.

So it too often comes to pass that consultations are insincere and futile. That consultant is called who is noted for his suavity, amiability and readiness to agree with the practitioner who honors him by calling him. He is not without good intent toward the patient, and indeed he really desires to accomplish his recovery. But if he offers anything helpful, or allows himself to give any suggestions of value, or to make any discoveries of points that have hitherto escaped notice, he is likely so artfully to conceal them under a varnish and gloss of corroberation and wholesale endorsement, as that they seem of little importance and are usually ignored.

Indeed the practitioner who thus comes in as a consultant is usually no better qualified to pass correctly upon mooted points of diagnosis or treatment than the practitioner already in attendance. He is, in most cases, as already intimated, not chosen as the one best prepared to give needed aid, but as the one whose advent into the case will be less competitive to the attendant. He is usually a practitioner whose location is remote and who on this account is

rendered less likely to follow up any advantage that might accrue from a successful issue of a case perhaps considered desperate. Or, he is a practitioner often of no special attainments outside of the experience gained in the daily round of visitations and ministration common to the vast multitude of doctors. Consequently, when called into consultation, he comes with no higher credentials and no better qualifications than those enjoyed by his associate who has called him. His judgment or opinion, therefore, cannot be authorative; and even if his conclusion is contrary to that of the attendant, the one merely neutralizes the other, and nothing at all is gained. Moreover, the average consultant is likely to be lacking in the refined skill and power of discernment needed to go more deeply into the case than the attendant has already gone.

But even if a most astute observer is called into counsel the conventional consultation is still defective because of the limited opportunity usually afforded for observation. The consultant, called from his own busy field, and perhaps hard pressed by engagements awaiting his return, sees the patient in question, perhaps once and briefly; at most infrequently and at a disadvantage, having to contend with the natural reserve manifested by patients towards strange and unfamiliar faces and the element of nervous over-tension which always attends a resort to extraordinary procedure. The examination thus made under adverse circumstances is most commonly superficial and perfunctory and the usual result is a most ready concurrence with the attendant's previous diagnosis and treatment.

The foregoing recital of the objections and defects of the conventional consultation leads, by natural transition, to a consideration of the requisites and qualifications of the ideal consultant. And while the requirements here to be suggested may seem visionary and utopian, they will nevertheless, be found based on reasonable grounds.

In the first place, the ideal consultant must limit himself to consultation practice and receive only referred cases. And this limitation must be observed by the specialists in every line of practice who desire to be considered by the family physician eligible as consultant. The reasons for imposing such restrictions are more or less obvious, but, for the sake of clearness, will be briefly stated. First, by limiting himself to consultation practice, the consultant ceases to be a competitor in the general field with him who calls him as counsel. If a physician is called into consultation in a difficult case, it usually gives him a badge of distinction in the eyes of the

onlooking friends, whether he deserves it or not. He is presumed by them to have special skill or insight; otherwise, it is reasoned, the physician in attendance would not have chosen him. With such an estimate in his favor, what is to hinder the family or persons who have been the beneficiaries of his services under trying circumstances from calling at the very onset of the next illness that one whose acumen and special gifts were so valuable and so conspicuously acknowledged on a former occasion?

And if the one called into counsel be a specialist in any one of the various departments, what is to prevent resort to this man of distinguished skill without intermediation when next the patient has an ailment surmised to come within the province so ably presided over by him? By so doing talent receives immediate instead of deferred recognition, and the pecuniary difference between the price of an office visit and that of a medical consultation is saved as a compensation for this timely anticipation of their necessities.

As a matter of fact consultants favored by the patronage and courtesies of the family physician with the distinguished and lucrative honors of consultation practice, afterwards, not infrequently, by the introduction thus received, make serious inroads on his field. Every specialist now takes cases at first hand. Oculist, aurist, laryngologist or surgeon will now receive cases without once asking the patient the name of his family physician. So what wonder that the general practitioner is becoming more and more self-contained, and doing for himself, even though imperfectly, what he used to be willing to send to others, or accomplish with their aid? What wonder that many general practitioners are losing interest in and withdrawing themselves from assemblages of medical men, cynical and pessimistic toward those abounding in such places who have in times past made them their selfish prey?

"But," it will be rejoined, "the consultant cannot afford to limit himself to such a narrow field as is here defined. The specialist cannot afford to restrict himself to referred cases. If he refers those who apply directly to him for his special services back to their family physician, they may, perchance, never return, the family doctor appropriating their cases to himself." Such a pretext as this is a confession that a large part of the specialist's work does not require special skill. And, as a matter of fact, this tacit admission is correct, and the general practitioner can do passing well a large part of the work that is done by the specialist. The specialist's legitimate and unchanged field of practice, in whatever department it may be, begins where there is required more than

ordinary technical knowledge, dexterity or skill, and such cases as do not require these extraordinary qualities properly belong to the regular family attendant. And he can never be a trusted consultant who will under any consideration ever take direct possession of a case that properly belongs to another without that other's consent.

Thus, it must be contended, the consultant, whether in the general or special departments of medicine, must confine himself to referred cases, for good and equitable reasons. By so doing, he will, in addition, be better able to qualify himself for efficient services; he will be able to declare himself with more authority; his opinion and advice will come to have larger value and greater weight both with attendant and patient; and he will be able to sit in counsel with a more evenly balanced and judicial mind.

The consultant who shapes his course toward this ideal must have a broad and liberal culture, and his technical attainments must be of the highest order. And when his services are required, he should be given extended and repeated opportunities for making such observations and investigations as the nature and difficulties of the case in hand may require. The powers of discernment, discrimination and interpretation of clinical findings are faculties, which, when possessed in high degree, in combination with rational and sound therapeutic attainments, constitute the prime attributes of the ideal consultant.

In the last place, but not least in importance, the ideal consultant should be a zealous defender and champion of professional decency and honor. He cannot hope to obtain or retain the confidence of the medical fraternity if he consorts with quacks. A consultant has no right to the respect and consideration of his fellows who holds any professional communications with medical pirates and outlaws. Medical duty does not justify such intercourse, and the respectable profession will never condone or tolerate it. Even though a few of the most prominent physicians of our own state may be cited as having been repeatedly and undeniably in league and alliance with the most infamous of medical outlaws, the act is none the less shameful and should be denounced in no uncertain terms on every hand.

This paper is the inadequate expression of what must have been generally felt as a need throughout the rank and file of the profession. It is not to be construed as a disparagement of the myriads of good medical men who from time to time gladly respond with their kindest endeavors to the call from their fellows for counsel

and aid. But it is a plea for a higher degree of attainment. and a consequent greater efficiency on the part of those who might well set themselves apart for a special and devoted service along these lines.

DISCUSSION.

DR. ROBERTS brought out the thought that in almost every community there were men, who by reason of years of experience, special study and research along certain lines, were eminently fitted to be called in by the regular physician as consultant in difficult cases; that the consultant should be selected by the man who has charge of the case, and not by the patient or friends. In the latter case a great many times the consultant is inferior in ability and experience to the one in attendance, and under these circumstances no gain accrues to either doctor or patient. The idea that we should have of a consultant is, that he be a man of better skill, wider experience, riper judgment, through years of study and experience along certain lines, than the one already in charge of the case. As a rule, after a physician attains to a certain age, after years of extended practice, he is apt to follow out certain special lines of extended research, thus eminently fitting himself for giving counsel and advice; the average man is not able to do this, and he should have no hesitation in calling in his more learned and experienced brother in the interest of his difficult cases.

DR. MAGEE spoke of the relationship which should exist between the general practitioner and the specialist, that the genera practitioner needs the specialist, and the specialist needs the general practioner, being of mutual help to each other, as well as conducing to the well being of their patients. The question arose so many times as to the duty of the specialist when called in to consult with doubtful practitioners, who were not just what they ought to be. The specialist is put to his wits' end at times to know what his duty is in such cases. Shall he consent to consult with these practitioners of doubtful ability and standing, or shall he refuse? He may be able to save the life of a patient, what is his duty in the case? These questions come up every day, and are very perplexing problems with which to deal.

DR. BOYD viewed the situation from the standpoint of the general country practitioner, and thought that if the general practitioner was honorable and square that he would probably be accorded the same treatment by the consultant; and that he need have little fear of the consultant taking any undue advantage of the situation, and endeavoring to secure these patients for himself. First of all, the consultant must be an honorable man; next, skilled and experienced in his profession; and if we hold up our end of the bargain there is not much to fear, and the sooner we get the idea out of our heads that somebody is trying to get our patients away from us the better.

The ethical side of the question was brought out. The consultant should be honest to himself, to the physician by whom called, to the patient, in every respect straightforward and honest; a man who at all times and under all circumstances protects the man he is called in to consult with; nor should he say anything which would in any way reflect upon the physician in charge of the case This should be fairly discussed aside, and not in the presence of patient or friends. Some consultants are prone to talk too freely and plainly to patients, this is not an ethical way of conducting such a case. It is true that the consultant is sometimes illy chosen by the general practitioner. Personal reasons often come in, rather than the question of real worth; those, perhaps, with whom he has political or business relations. Is that the proper consultant, as a rule, to call in? In all justice to the case, that man should be called in who is supposed to have a certain special training and experience along such special lines as will fit the case in hand. The consultant should limit himself to special lines. There are those who claim to be specialists in everything, the eye, ear, gynecology, obstetrics, surgical work, etc., etc. He is called in; patient recovers. The next month the family calls him in to treat a general disease, but that is not the true specialist as he should be. Let the consultant limit himself to something, and not try to be an all-round specialist; he can't be just to the profession which employs him.

DR. DAVIS:—In selecting a subject for a paper, without regard to its scientific character, my object was to select one which would be of general interest, and for that reason this topic was chosen. My idea was not to reflect upon any certain class of practitioners, but to dwell upon and emphasize certain unconscious shortcomings which seem to be prevalent in the experience of all. We all know that our experiences with the consultant are not all as satisfactory as they should be, and no guilt attached to the one in consultation. A mercenary spirit seems to dominate some of these individual, and the only gain or benefit derived in such instances is when a consultant collects his fee. I do not presume to be able to define the much discussed specialist. A specialist is said to be "one who possesses special skill, dexterity and knowledge in any line of research." In doubtful cases where it seems the advice of a specialist is required, we should call in one who makes that part of the body involved a specially, as for instance, the eye or ear. By so doing of course we give him prestige in the case, which give him a wedge to use to the great detriment of the family physician, if he desires to do so. However, this field of specialism is so divided up that it is difficult to say as to what remains for the general practitioner.

Dr. Dwight W. Chase who graduated in 1846 at the Jefferson Medical College (Phila.) and who practised in Delphos, died in Salina on January 18.

AN ACT

CONCERNING RAILROADS AND OTHER COMMON CARRIERS IN THEIR RELATION TO THE PUBLIC HEALTH AND PROVIDING PENALTIES FOR THE VIOLATION OF THE PROVISION OF THE SAME.

Be it enacted by the legislature of the State of Kansas.

Section 1. It shall be unlawful for any railroad company or other common carrier in this state transporting passengers for hire to use, operate or permit the use thereof by its agents, servants or employees upon any line of railway in this state, any passenger car, coach, sleeping car, or other car designed and in use for the transportation of passengers without having caused said car, coach or sleeping car to be thoroughly disinfected and fumigated at terminal stations or other passenger division points on the several lines of railway doing business in this state; such disinfection and fumigation to be thoroughly sufficient and complete to prevent the spread of contagious or infectious diseases; provided that street railway cars and passenger coaches of local railway trains made up in the state and reaching the point of destination within twenty-four hours, shall only be required to be disinfected at such times as the State Board of Health may designate.

Section 2. Such inspection and fumigation may be made by an employee of such railway company under the direction of a physician employed by such company, provided such means and methods used for such disinfection and fumigation shall be approved by the State Board of Health. The employee or physician making such inspection and fumigation shall cause to be posted in a conspicuous place in such car, coach or sleeping car, a certificate under his hand, certifying that said car, coach or sleeping car.

Section 3. It shall be unlawful for any physician or employee to certify to any false certificate, or if any agent, servant or employee of the railway company shall knowingly use any false certificate, or shall use or permit the use of any certificate in any car, coach or sleeping car other than the one in which said certificate was first posted, such act shall be unlawful.

Section 4. The inspection and fumigation herein provided for shall be made at a terminal station or a passenger division point before any car, coach or sleeping car is taken out for the making up of trains, and any time the State Board of Health of Kansas, by its Executive Officer, shall be satisfied that any railway company doing

business in this state is not faithfully complying with the provisions of this act he shall cause any railway car, coach or sleeping car to be quarantined, and it shall be unlawful for any agent, servant or employee of such railway company to thereafter use the same until it is inspected and fumigated as herein provided.

Section 5. It shall be unlawful for any person afflicted with diphtheria, measles, smallpox or scarlet fever, or any person having charge of children suffering from the same, to knowingly enter or take any child in his or her charge into any passenger car, coach or sleeping car, or other car designated and in use for the transportation of passengers in this state.

Section 6. Any person violating any of the provisions of this act shall be guilty of a misdemeanor and on conviction thereof shall be fined in a sum not exceeding Fifty Dollars ($50.00), or imprisoned in the county jail for a period not exceeding thirty (30) days.

Section 7. This act shall take effect and be in force from and after its publication in the official state paper.

KANSAS STATE BOARD OF HEATH.

Capital Building, Topeka.

February 13, 1905.

The following contagious and infectious diseases have been reported to this office for the month of January:

DIPHTHERIA.

COUNTY.	CASES.	DEATHS.	COUNTY.	CASES.	DEATHS
Bourbon	2	2	Montgomery	2	0
Brown	2	1	Nemaha	7	1
Cherokee	3	2	Wabaunsee	1	0
Clay	2	0	Leavenw'thCity	18	2
Finney	1	0	Topeka City	10	2
Graham	2	0			
Labette	5	0	Totals	55	10

SCARLET FEVER.

Brown	3	0	Mitchell	6	0
Cherokee	2	0	Pawnee	1	0
Clay	10	0	Pratt	1	0

COUNTY.	CASES.	DEATHS.	COUNTY.	CASES.	DEATHS.
Cloud	2	0	Rawlins	2	1
Crawford	5	1	Reno	5	0
Douglas	1	0	Saline	1	0
Elk	6	0	Sedgwick	2	0
Ford	15	0	Shawnee	1	1
Harvey	2	1	Washington	5	1
Lyon	3	0	Woodson	8	1
Labette	6	0	Leavenw'th City	2	0
Marion	5	1	Topeka City	12	1
Marshall	20	1			
McPherson	17	0	Totals	149	9
Meade	6	0			

SMALLPOX.

Allen	3	0	Marshall	3	0
Anderson	1	0	McPherson	63	0
Atchison	3	0	Miami	?	0
Bourbon	25	0	Mitchell	33	
Brown	75	1	Montgomery	1	0
Cloud	2	0	Osborne	15	0
Crawford	19	0	Pawnee	8	0
Ellis	120	1	Pottawatomie	?	0
Franklin	23	0	Rawlins	41	0
Gove	33	0	Reno	22	0
Graham	5	0	Rooks	?	0
Harvey	1	0	Russell	?	0
Jackson	3	0	Saline	32	0
Lyon	23	0	Sheridan	7	0
Labette	4	0	Thomas	5	0
Lane	12	0	Wabaunsee	1	0
Lincoln	25	0	Woodson	1	0
Marion	101	0	Topeka City	3	0
			Totals	713	2

TYPHOID FEVER.

Atchison	1	0	Labette	2	1
Cherokee	1	1	Leavenworth	1	0
Crawford	2	0	Nemaha	2	1
Hodgman	2	0	Thomas	2	0
			Totals	13	3

S. J. CRUMBINE, M. D., *Secretary*

The Iowa Medical Journal issued in January a complete directory of the state. It is a valuable work and one which we hope soon to be able to do for Kansas. We think that Dr. Dorr is doing a valuable work for Iowa in making his journal such a representative one.

(Continued from page 85.)

sults, examinations for insurance and glasses (if a plano glass be found over the bad eye it would be important to know from the fitters' records whether the eye was totally blind then or was normal and needed no correction.)

Examination. It will be well to remember that partial or total blindness may exist without apparent lesion, *e. g.* toxic amblyopias, early stage of optic atrophy, color blindness, scotoma, hemianopsia, amblyopia ex anopsia and congenital blindness, (fourteen cases of word blindness see Prog. Medicine 1899 Vol. IV and Ophthalmology Vol. I, No. 2.)

The latitude of examination allowed will depend on the kind of case as cited above. In a damage suit before trial the plaintiff's attorney may allow only a superficial examination by an oculist examining for the defendant. In this connection I noticed in a newspaper a few days ago that a district judge had decided that hereafter in cases requiring expert medical testimony, he would appoint the physicians and not allow corporations to call them and pay them as heretofore. It appears to me that it would be fair to both sides if the following plan were adopted: The plaintiff and defendant each have one or two physicians apiece to start with, these choose an odd one and if they agree on the main points at issue their report is accepted as final. If they cannot agree, the testimony of each is taken separately with the balance of power in favor of the odd man. The cost of the examinations would be divided between both sides equally.

Referring to our previous classifications we find that with five degrees of blindness and three different bases for the claim we should have fifteen variations to consider. Probably the first thing to settle would be the basis of the claim. It is assumed that if necessary all the mechanical aids will be used which would be used in determining disease or refractive conditions. With a lesion found the question of its true origin is a question which the past experience of the oculist will have to answer. Some of the tests for vision better than alleged are:

1. Pupillary reactions to light and accommodation (a) direct, (b) consensual.

2. Surprises (a) recovering from general anesthesia, (b) sudden light or feints to strike.

3. Eye movements (a) voluntary (look at hand), (b) involuntary (overcoming prisms).

4. Image fusion with stereoscope or amblyoscope.
5. Image separation:
   (a) candle beyond bridge of nose.
   (b) colored lenses and figures.
   (c) bar reading (pencil, strong sphere, single and double cylinders.)
   (d) strong prism (center of pupil, etc.)
   (e) double mirrors (Fles box and modifications.)

The feigning of bilateral total blindness is extremely improbable. Close inspection of the gait and efforts to avoid obstacles may give clues. Surprise tests are of great value and nitrous oxide gas is particularly recommended on account of its almost perfect safety and the fact that the patient is anesthetized and over it in about five minutes. Among other surprise tests the feints to strike with inflatable paper snakes and toys with a scissors extension movement are suggested. These tests may be used on one alleged blind eye if the good eye is excluded from light. Pupilliary reactions are quite conclusive, though care must be taken to exclude the possible influence of drugs.

With two supposed blind eyes or testing one eye with the good eye bandaged securely as above, the oculist places the patients' hand in various positions and tells him to look at it. If he is recently blind and willing to do as told the eyes will turn in the right direction (guided by the muscular sense), but a malingerer will look in a different direction.

With one or two supposedly blind eyes, both being held open, with a weak prism before one, in order to avoid diplopia the covered eye will move if it sees fairly well and not at all if blind.

In addition to the above tests, where one eye is supposedly blind the tests based on the fusion and separation of images of the two eyes may be used, cautioning the patient that any attempt to close one eye at a time will be an evidence of bad faith. In making the fusion tests with the stereoscope, allowance must be made for errors of refraction and lack of fusion sense. Among the separation tests the candle test is not of great value. The Fles box and its numerous modifications have the disadvantage of not being simple and readily available. Among bar reading tests the double cylinders are perhaps the most deceptive. Probably the two tests most relied on for the subjective examination and simplest in application are the diplopia test with strong prism over one eye and the colored lenses and figures. In order to increase the efficiency of the prism test I suggest the use of the prism battery as used in

muscle testing. With some of the above tests the degree of acuteness of vision may be estimated for the alleged blind eye but as the patient usually claims that he is totally blind, it is sufficient to disqualify him as a witness to prove that he sees a little.

For more minute details of tests given above see works referred to at the end of this article. My main object was to present the two cases as an incentive for further reports from other sources. I did not find any cases reported in *The Index Medicus, Year Books for the Eye, Ear, Nose and Throat, Journal A. M. A, Ophthalmic, Record*, etc., for the past three or four years.

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1892—Fuchs-Opthalmology.
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1396—Fick-Dis. of the Eye.
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1899—Norris & Oliver System Dis. Eye.
1899—Am. Textbook E. E. N. & Throat.
1899—Haab-Atlas External Dis. Eye.
1900—Taylor-Law in its Relations to physicians.
1902—Posey & Wright- Dis. E. E. N. & Throat.
1903—Peterson & Haines-Leg. Med, & Toxicology.

Examination Free—We confess to a feeling of sympathy to that portion of the public which is allured by the "examination free" advertisement of the charlatan. What the public is willing to pay for is treatment, and very few persons realize that the diognosis is much more difficult than the treatment. If we were putting as much reading matter before the public as the quacks are, we should have no difficulty in persuading at least a few of them that to pay for a diagnosis is a profitable investment. But under the present circumstances we wonder if it would not be well for the physician to keep his drugs and treatment under his own control and by charging for them secure enough to compensate him for (apparently) "free examinations."

SOCIETY NEWS.

Annual Meeting of the Shawnee County Medical Society.—The Shawnee County Medical Society held its regular annual meeting and election of officers at the parlors of the National Hotel, Monday evening, February 6 The following officers were elected for the ensuing year: President, Dr. E. M. Brockett; Vice President, Dr. O. P. Davis; Secretary, Dr. Frances A. Harper; Treasurer, Dr. J. P. Lewis. The retiring president, Dr. W. A. Wehe, gave the regular annual address.

An elegant "spread" followed the business meeting, in which the doctors and their wives participated. Dr. H. L. Alkire acted as toast master, the following toasts being responded to:

"The doctor as a statesman,".....Dr. L. M. Powell
"Some stories that might be told,".....Dr. S. G. Stewart
"Doctor bills and other bills,".....Dr. S. E. Smith
"What to do when the doctor comes,".....Dr. L. Y. Grubbs
"The little hut on the hill,".....Dr. N. J. Taylor
"Practising by machinery,".....D. T. W. Peers
"Hot chestnuts,".....Dr. B. D. Eastman

Guests of honor present were, Dr. J. H. Brierly, Glasco, Dr. C. S. Huffman, Columbus, Dr. S. S. Glasscock, Kansas City, Kansas.

FRANCES A. HARPER, *Sec'y.*

Our Journal—Please note the increased size of our JOURNAL—and note that the increase is in the reading pages. Now compare the number of *bona fide* pages of *original* contributions in our JOURNAL with that in any journal in the middle West. The man in the editor's chair sees so much of copied stuff and reprints in the medical journals that he wonders if the physicians of Kansas appreciate his effort to bring before them honest contributions to the literature of medicine. It is true that our pages are not filled with epoch making material, but they are filled with discussions of the problems actually facing Kansas physicians—and the men who keep their minds firmly fixed on first principles are those who will succeed.

Atchison County Society has elected C. H. Linley, president; Wiley Jones, vice president; A. B. Chase, secretary; M. T. Dingess, treasurer; and E. P. Pitts, delegate to state society.

New Members of the A. M. A.—The following members of our Society have joined the American Medical Association during the last month: J. T. Axtell, of Newton; Robert Algie, Linn; J. B. Dykes, Lebanon; H. A. Dykes, Lebanon; E. G. Mason, Cawker City; R. R. Riley, Coyville; N. J. Taylor, Berryton.

The Antiphlogistine Company have issued an attractive brochure on the action and effects of antiphlogistine. The colored plates are too little differentiated to be artistically successful. However the points in the booklet as to the methods of application are worth the reading of every man who uses the kaolin preparations.

Cerebro-spinal Meningitis.—Quite the most fatal case of this disease in my knowledge occurred on February 25, when a healthy eighteen months boy was seized in his sleep at noon with convulsions. I was called at half past one and found the pupils dilated, skin livid, axillary temperature apparently normal (due to an error on the part of the nurse; the temperature must have been higher), pulse from 100 to 120. Every 3 or 4 minutes a clonic spasm from head to feet would pass over him. I thought first of intestinal intoxication and asked that he be given a hot soap suds enema—at the same time using per oram calomel one tenth grain every fifteen minutes. After the enema, which was without result, I gave a hot pack for fifteen minutes to relieve the spasms. This failing and since the child could not swallow easily, I gave $\frac{1}{8}$ grain of morphine hypodermically. But in spite of this the spasms became worse and more frequent with extreme opisthotonos. The temperature now registered under the arm 106 °. I applied ice to the occiput and spine but without result. Even a hypodermic injection of nitroglycerine and strychnine failed to keep the heart going and the end came at 3:30 p. m. Kernig's sign became pronounced about one half hour after I saw the child. The grandmother, however, says that the child for two nights had been restless and persisted in rising on its knees in the bed. The cephalic cry began about 2:15 and stopped about 3 p. m. The child showed signs of pain when the left mastoid was tapped, but no swelling or ear complications was apparent. Toward the last the left pupil remained very much dilated while the right returned to a medium stage of dilation.

Chemical Diagnoses—The Ohio State Board of Health now examines material for a diagnosis in suspected tuberculosis, diphtheria, and typhoid fever. Mailing covers are furnished druggists in each county, so that physicians can easily obtain them for forwarding the specimens. This is an excellent work and one which we would commend to the department of bacteriology and pathology of our state university.

Politics in New Zealand—Now that monopoly is showing its evils, and grafting has become a fine art, we believe that our Kansas physicians would be delighted as well as helped in reading Dr. Taylor's "Politics in New Zealand"—because it shows the workings of a conservative socialism, such as we are being driven to in the United States. The fact that "Standard Oil" has bought up the Santa Fe as well as the Union Pacific in this state, that "Standard Oil" has smashed the value of the Kansas oil fields, and the fact that nowhere is grafting such a science as in Kansas, all tend to make the study of any method of relief of vital importance to the physicians of Kansas. We would suggest that each one of our readers procure a copy of Dr. C. F. Taylor's (Philadelphia) book and work out the subject for himself. "Our fathers fought and conquered the aristocracy of birth; our brothers in New Zealand have fought and conquered the aristocracy of wealth."

PITTSBURG, KANSAS. Feb. 21, 1905.

George Howard Hoxie, M. D., Editor:

Dear sir:—In a recent issue of your JOURNAL you enumerated the county societies of the state and I notice you left out Crawford county.

It was probably an error or more probably its organization had never been reported to you. We organized quite a nice society in January 1904 with a membership of twenty-five and held several interesting meetings, the last one occurring in March last. For some unknown reason enthusiasm died out and the Crawford County Medical Society exists in name only. Repeated efforts to bring about another meeting has met with dismal failure and if you can suggest a way through the columns of your splendid JOURNAL whereby new life may be infused into our lagging veins the results may be mutually beneficial.

It is gratifying to know that the medical profession of the state is being united into a strong body and I thoroughly appreciate the

efforts of the editor and indorse the stand he has taken to perfect more complete organization.

At present the officers of our society are as follows:

E. O. Sloan, Pittsburg, *President*; A. J. Dodds, Fleming, *Vice-President*; A. C. Graves, Pittsburg, *Treasurer*; and H. B. Caffey, Pittsburg, *Secretary*.

I hope the local profession will be well represented at the Portland meeting of the American Medical Association as attending even one of these meetings will do wonders toward cementing a closer union and fellowship among us. Very truly yours,

HUGH B. CAFFEY, M. D.

ADULTERATED FOOD PRODUCTS AND FOOD STUDIES.

E. F. LADD.

Chemist and Food Commissioner, Fargo, North Dakota, U. S. A., November, 1904.

Abstract from North Dakota Agricultural College, Government Agricultural Experiment Station of North Dakota, Bulletin No. 63.

LIQUOZONE.

This product is largely advertised and sold in North Dakota, and has frequently found its way to our laboratory for analysis. It is made by the Liquid Ozone Company, Chicago. After enumerating fifty diseases for which liquozone is recommended, they add "All diseases that begin with fever—all inflammation, all catarrh in any part of the body, all contagious diseases, all the results of impure or poisoned blood." "We will pay $1000 to the physician or scientist who discovers a disease germ which liquozone will not kill." "Liquozone, liquid oxygen invariably cures any trouble caused in any way by germs." It will be seen by the last statement an attempt is made to convey the idea that liquozone is liquid oxygen, a ridiculous and false statement. They would have the public believe liquozone a "cure all" for everything, from weak eyes to asthma, pneumonia and piles, In water it will purify it, and prevent typhoid. In milk it will sterilize it, and in beer it prevents fermentation and biliousness.

What is this wonderful product so persistently advertised and lauded by its interested promoters? One sample of liquozone was found to contain a total acidity of 1.34 per cent. of which 1.18 per cent. was in the form of sulfuric and sulfurous acid. The total solids of black liquid residue of acid reaction amounted to 1.82 per cent., and the ash residue to 0.025 per cent. The character of the solid and ash clearly indicate free acid. Other samples examined by us have shown an acid content of as high as 1.73 per cent., indicating that the product is not by any means uniform in its composition. The free use of any product containing this amount of uncombined sulfuric and sulfurous acid cannot be looked upon as wholly with-

out possible harmful effect upon the human system. The public will do well to use such products only upon the advice of the family physician.

A CASE OF PNEUMONIA FOLLOWING SEVERE TYPHOID—RECOVERY.

"J. B. W. White, male, age 30 years, was recovering from a severe case of typhoid. On the 36th day his temperature was normal. On the 39th day it again began to rise and in a few days had reached 104·5°, the pulse 140. A severe cough and consolidation of the right lung told the story of a complicating pneumonia. After the long and severe drain upon his resources incident to the typhoid his condition presented a very alarming, not say, desperate situation.

Counsel was called and it was decided that his only hope lay in the generous use of Antiphlogistine. A 'Large' package was secured and heated by placing the sealed can in hot water. The temperature of the room was brought up to about 80°. A cotton lined cheese-cloth jacket, open upon the shoulders and in front was prepared and warmed. Uncovering the patient's thorax, Antiphlogistine as hot as could be borne was spread upon the skin about ¼ inch thick over as much of the thoracic walls as could be reached (back, front, side and over the shoulder.) This was covered with the jacket. Turning the patient over, the other side was dressed in the same way. The jacket was then drawn together over the shoulders and down the front with stout thread. It is proper to say the entire contents of the 34½ oz. package (Large) was used for the one dressing.

The effect was surprisingly prompt. In a few hours, the temperature had declined to a point of safety and the pulse to 120. A similar dressing was applied fresh every 24 hours. The improvement was steady and marked and in six days the patient was again convalescent, thanks to Antiphlogistine.

The brilliant outcome in this case taught me the importance of careful attention to detail in the use of Antiphlogistine. Like every thing else worth while it must be properly used if the best results are to be obtained."

For Sale—An established medical and surgical practice of eleven years. For particulars address with stamp, 806 D St., Perry, O. T.

"Hagee's Cordial Cod Liver Oil Compound is very highly recommended for all cases of lung trouble, as a restorative in children as well as adults, after pneumonia and la grippe. In bronchitis in old people it is excellent. It is palatable, easily assimilated, and is a good tissue builder. Often where other preparations of cod liver oil have been taken without the least benefit, Hagee's will be found to do the work."—*The Kansas City Medical Index-Lancet.*